

# Flat-Field Correction when Image Stitching

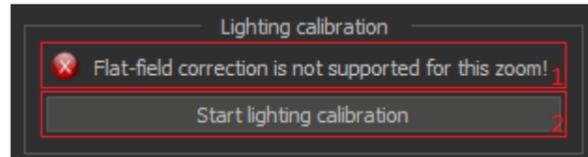
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## What is Flat-Field Correction?

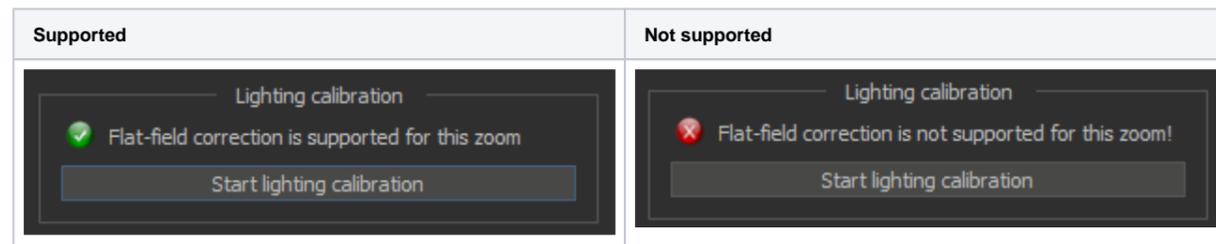
The light source of the microscope cannot perfectly uniformly illuminate the surface of an object. When stitching a large image from a set of smaller ones (see [here for details](#)), these uneven lighting lead to a bad result - the stitching seams become visible. The flat-field correction tool allows you to compensate for uneven lighting

## GUI description

The GUI for the **Flat-Field Correction** tool is located in the **Image Stitching** panel (in the right panel of the **Processes** tab)



1. The status of supporting the flat-field correction for current zoom. Determines if calibration data for compensation is available



2. The button to start/cancel lighting calibration data collection for each zoom on which you can get image stitching

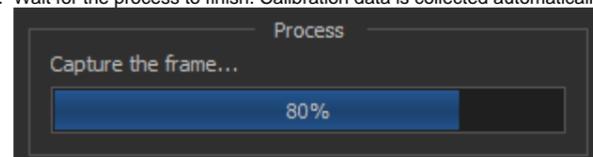
## How to use (Step-by-Step Guide)

The following describes the process of collecting calibration data for the flat-field correction.

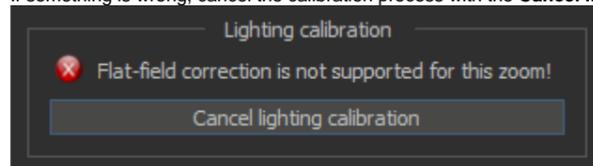
1. Set a flat white object for calibration (e.g. white piece of paper)
2. Set the object perpendicular to the optical axis of the lens and focus on the surface of the object. Also it is necessary that the object occupies the entire flat of view when minimum zoom



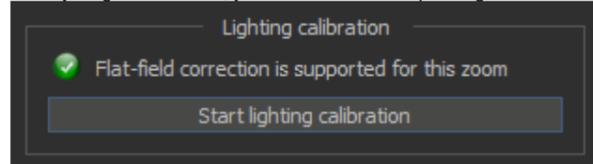
3. Push the **Start lighting calibration** button
4. Wait for the process to finish. Calibration data is collected automatically. At each zoom, autofocus is performed on the surface, camera exposure is selected, and then the frame is shot



5. If something is wrong, cancel the calibration process with the **Cancel lighting calibration** button



6. If everything is successful, you will see the corresponding status in the GUI of the flat-field correction tool



This means that will be performed flat-field correction at next image stitching (for the selected scanning zoom). This correction is made automatically, no action is required from the user.